

### DETAILED ACTION

Applicant amendment after Final dated 7/31/2009 has been entered.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James Ledbetter on 9/14/2009.

The application has been amended as follows:

**Claim 8 ( Amended )** : A method for the formation, on a display stationed at a fixed post , of successive images of a scene towards which a flying body is moving while rotating about its longitudinal axis , said flying body communicating with said fixed post by virtue of linking means , characterized in that a picture-taking apparatus , is fixed rigidly to the front of said flying body , in such a way that said apparatus ,turns with said flying body about said longitudinal axis; during each revolution of the rotation of said flying body about said longitudinal axis , several pictures of said scene each corresponding to a predetermined angular position of said flying body about said longitudinal axis are taken with said apparatus, so that [the] contours of said several pictures are inclined in mutually differing manners and so that, in each picture, the image of said scene and said contour occupy a relative position which depends on said corresponding predetermined angular position of said flying body and which is different

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from that of the other pictures; determining among said pictures, a reference picture in which said relative position between the image of the scene and the contour is considered to be a relative reference position; applying in each picture, other than the reference picture a geometrical image transformation processing to the image of said scene so that the relative position of the transformed image of said scene with respect to the contour is similar to said relative reference position; and

displaying said reference picture and said pictures having undergone said geometrical image transformation processing are displayed successively on said display , wherein :

the rotation of the flying body is initiated at the moment of its launching.

**Claim 9 (Amended):** A system comprising: at least one flying body, rotating about its longitudinal axis as it flies;

a fixed post furnished with a display that displays images of a scene towards which said flying body is moving while rotating; and

a link that provides for the communications between said flying body and said fixed post;

a picture-taking apparatus , fixed rigidly to the front of said flying body [~~so as to observe said scene;~~ ] , in such a way that said picture-taking apparatus , turns with said flying body about said longitudinal axis; during each revolution of the rotation of said flying body about said longitudinal axis , several pictures of said scene each corresponding to a predetermined angular position of said flying body about said

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longitudinal axis are taken with said apparatus, so that contours of said several pictures are inclined in mutually differing manners and so that, in each picture, the image of said scene and said contour occupy a relative position which depends on said corresponding predetermined angular position of said flying body and which is different from that of the other pictures; determining among said pictures, a reference picture in which said relative position between the image of the scene and the contour is considered to be a relative reference position;

a control unit that controls said picture taking apparatus at each of several predetermined angular positions of said flying body about said longitudinal axis ; and a processor that performs geometrical image transformation processing for presenting the pictures taken by said apparatus at different angular positions with a similar relative position of the image of said scene with respect to the contour of said pictures , wherein:

the rotation of the flying body is initiated at the moment of its launching.

### ***Allowable Subject Matter***

2. Claims 8-15 are allowed.

The following is an examiner's statement of reasons for allowance: The following is a statement of reasons for the indication of allowable subject matter: After reviewing the remarks made by the Applicant in response to the non-final office action the Examiner finds the remarks to be persuasive. The most pertinent prior art is Rutt (EP 0447080)

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and Claus et al (US 7,133,067). Rutt discloses a reconnaissance device comprising, an elongated body having a flight-arresting device at one end, an image-forming device at the other and a telemetry package in the central part of the body of the device.

Preferably the device is interchangeable with a standard mortar bomb. Claus teaches a high-precision digital image stabilization of an image recording with a CCD sensor utilized in a moving or flying carrier. For the digital image stabilization, the movements of the carrier are detected with the aid of an inertial sensor and stored. Then, a correction of the image data is carried out based on the detected movements.

Neither Rutt nor Claus discloses:

*taking with said apparatus , during each revolution of the rotation of said flying body about said longitudinal axis, several pictures of said scene each corresponding to a predetermined angular position of said flying body about said longitudinal axis , so that contours of said pictures are inclined in mutually differing manners and so that, in each picture, the image of said scene and said contour occupy a relative position which depends on said corresponding predetermined angular position of said flying body and which is different from that of the other pictures; determining among said pictures, a reference picture in which said relative position between the image of the scene and the contour is considered to be a relative reference position; applying in each picture, other than the reference picture a geometrical image transformation processing to the image of said scene so that the relative position of the transformed image of said scene with respect to the contour is similar to said relative reference position; and*

*displaying said reference picture and said pictures having undergone said geometrical image transformation processing are displayed successively on said display , wherein :*

*the rotation of the flying body is initiated at the moment of its launching.*

The Examiner finds no reason or motivation to combine the above references in an obviousness rejection thus placing the application in condition for allowance.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nancy Bitar/  
Examiner, Art Unit 2624

**/VIKKRAM BALI/  
Supervisory Patent Examiner, Art Unit 2624**